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Memo

To: CCAG Members
From: CCS
CC: ADEQ
Re: Draft Policy Options for Consideration
Date: May 16, 2006

This document provides summary tables of the 50 draft policy options developed by Technical Work Groups (TWGs) for consideration at our Climate Action Plan Advisory Group (CCAG) meeting on Tuesday, May 16, 2006. Detailed descriptions and results for these draft policy options are posted on the project website (www.azclimatechange.us) for background review. Please be familiar with these documents in advance of the meeting to expedite our discussion of the draft policy options.

At our CCAG meeting we plan to review all draft options and seek approval for as many as possible for final recommendation (subject to any final text and technical cleanup that may be needed). Where we do not yet have full consensus for remaining draft policy options, we plan to identify specific barriers to consensus for individual options, as well as potential alternative approaches such that these options can be considered for approval by the CCAG at its last meeting on June 22. We will review our procedures for considering the draft policy options at the beginning of the meeting, as well as reviewing summary results for all options combined.

We look forward to a productive meeting and appreciate your hard work on the development of the draft policy options for consideration at the meeting.

Table 5.

Residential Commercial and Industrial Technical Work Group

Summary List of Draft Policy Options (12 Total)

#	Policy Name	GHG Savings (MMtCO ₂ e)	Cost-Effectiveness (\$/tCO ₂ e)	Next Steps (Completed/Pending)
RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL				
RCI-1	Demand-Side Efficiency Goals, Funds, Incentives, and Programs	2010: 3.1 2020: 15.1	- \$36	
RCI-2	State Leadership Programs	2010: 0.04 2020: 0.4	- \$4	
RCI-3	Appliance Standards	2010: 0.2 2020: 1.0	- \$66	
RCI-4	Building Standards/Codes for Smart Growth	2010: 0.3 2020: 2.2	- \$18	
RCI-5	“Beyond Code” Building Design Incentives and Programs for Smart Growth	2010: 0.2 2020: 3.1	- \$17	
RCI-6	Distributed Generation/Combined Heat and Power	2010: 0.4 2020: 2.7	- \$25	
RCI-7	Distributed Generation/Renewable Energy Applications	2010: 0.1 2020: 2.1	\$31	
RCI-8	Electricity Pricing Strategies	2010: 1.1 2020: 1.5	-\$63	
RCI-9	Mitigating High Global Warming Potential (GWP) Gas Emissions (HFC, PFC)			
RCI-10	Demand-Side Fuel Switching	2010: 0.1 2020: 1.2	<i>Not Yet Estimated</i>	
RCI-11	Industrial Sector GHG Emissions Trading or Commitments			
RCI-12	Solid Waste, Wastewater, and Water Use Management			

Table 9.

Agriculture and Forestry Technical Work Group
Summary List of Draft Policy Options (15 Total)

#	Policy Name	GHG Savings (MMtCO ₂ e)	Cost Effectiveness (\$/tCO ₂ e)	Next Steps (Completed/ Pending)
FORESTRY				
F-1	Forestland Protection from Developed Uses	2010: 0.3 2020: 0.3	TBD	
F-2	Reforestation/Restoration of Forestland	2010: 0.02 2020: 0.2	TBD	
F-3a	Forest Ecosystem Management – Residential Lands	2010: 0.5 2020: 0.5	-\$56	
F-3b	Forest Ecosystem Management – Other Lands	2010: 0.2 2020: 0.2	-\$56	
F-4	Improved Commercialization of Biomass Gasification and Combined Cycle	TBD	TBD	
AGRICULTURE				
A-1a	Manure Management – Manure Digesters	2010: 0.1 2020: 0.4	\$6.83 (dairies only)	
A-1b	Manure Management – Land Application	TBD	TBD	
A-2	Biomass Feedstocks for Electricity or Steam/Direct Heat	2010: 0.04 2020: 0.1	-\$63	
A-3	Ethanol Production (this option is included in total TLU GHG results and excluded from AF total GHG results)	2010: 0.49 2020: 0.64	TBD	
A-4	Change Feedstocks (optimize for CH ₄ and/or N ₂ O reduction)	2010: 0.03 2020: 0.07	\$165	
A-5	<i>Reduce Non-Farm Fertilizer Use</i>	N/A	N/A	
A-6	Grazing Management	TBD	TBD	
A-7	Convert Land to Grassland or Forest	TBD	TBD	
A-8	Agricultural Land Protection from Developed Uses	2010: 0.2 2020: 0.5	TBD	
A-9	Programs to Support Local Farming/Buy Local	2010: 0.003 2020: 0.01	TBD	

Table 7.

Transportation and Land Use Technical Work Group Summary List of Draft Policy Options (6 Total)				
#	Policy Name	GHG Savings (MMtCO ₂ e)	Cost-Effectiveness (\$/tCO ₂ e)	Next Steps (Completed/Pending)
PASSENGER VEHICLE GHG EMISSION RATES				
TLU-1	California GHG Emission Standards	2010: 0-0.3 2020: 5.6	-\$94.58	
LAND USE AND LOCATION EFFICIENCY				
TLU-2	Smart Growth Bundle of Options	2010: 0.6-3.2 2020: 0.7-4.0	Net Savings	
INCREASING LOW-GHG TRAVEL OPTIONS				
TLU-3	Multimodal Transit Bundle of Options	TBD	TBD	
FREIGHT				
TLU-4	Reduction of Vehicle Idling <i>(new TLU-4 combines former TLU-4 and -5)</i>	2010: 0.3-0.5 2020: 0.5-0.7	-\$61 to -\$107	
FUELS				
TLU-5	Standards for Alternative Fuels (Ethanol Production Option A3 is included under total TLU GHG results and excluded from total AF GHG results)	2010: 0.49-0.49 2020: 0.64-4.03	N/A	
TLU-6	Gasoline Tax	N/A	N/A	

Table 3.

Energy Supply Technical Work Group			
Summary List of Draft Policy Options (12 Total)			
#	Policy Name	GHG Savings (MMtCO ₂ e)	Cost Effectiveness (\$/tCO ₂ e) Next Steps (Completed/Pending)
RENEWABLE AND LOW-EMITTING ENERGY			
ES-1	Environmental Portfolio Standard / Renewable Energy Standard and Tariff	1a(0) 2010: 0.80 2020: 4.4	\$13
		1a(1) 2010: 1.39 2020: 8.0	\$8
		1a(2) 2010: 1.42 2020: 7.7	\$12
		1b 2010: 2.31 2020: 9.2	\$4
		1c 2010: 4.19 2020: 16.4	\$6
ES-2	Public Benefit Charge Funds	2010: 1.46 2020: 4.1	\$280
ES-3	Direct Renewable Energy Support (including Tax Credits and Incentives, R&D, and siting/zoning)	(via RCI-7) 2010: 0.1 2020: 2.1	(via RCI-7) \$31
EMISSIONS POLICIES			
ES-4	GHG Cap and Trade	(1) 2010: -0.28 2020: 4.4	\$7
		(2) 2010: 0.17 2020: 2.0	\$10
		(3) 2010: -0.2 2020: 16.5	\$17
		(4) 2010: 0.18 2020: 18.5	\$19
ES-5	Generation Performance Standards	2010: 5.63 2020: 10.2	\$29
ES-6	Carbon Intensity Targets	2010: 0.0 2020: 14.0	\$44
ES-7	Voluntary Utility CO ₂ Targets and/or Trading	2010: 0.0 2020: 2.2	\$29

ES-8	CO2 Tax	2010: 0.53 2020: 2.4	\$3
GRID AND UTILITY POLICIES			
ES-9	Reduce Barriers to Renewables and Clean DG	(via RCI-6) 2010: 0.4 2020: 2.7	(via RCI-6) -\$25
ES-10	Metering Strategies		
ES-11	Pricing Strategies	(via RCI-8)	(via RCI-8)
ES-12	Integrated Resource Planning	2010: 0.06 2020: 5.4	-\$2

Table 11.

Cross Cutting Issues Technical Work Group
Summary List of Draft Policy Options (5 Total)

#	Policy Name	Next Steps (Completed/Pending)
CROSS CUTTING ISSUES		
CC-1	State Greenhouse Gas Goals	
CC-2	State Greenhouse Gas Reporting	
CC-3	State Greenhouse Gas Registry	
CC-4	State Climate Action Education	
CC-5	State Climate Change Adaptation Strategy	